Amendments to the Claims

Please cancel claims 16, 17, and 27-33, and amend claims 18 and 21 as follows:

1. (Cancelled)

2. (Previously Submitted) The method of claim 34, wherein the analysis yields a result that is indicated to an operator of the vehicle.

3. (Previously Submitted) The method of claim 34:

wherein the analysis yields a result; and

further comprising wirelessly communicating the result to a vehicle management facility.

4. (Original) The method of claim 3, wherein the wirelessly communicating is via a cellular telephone network.

5. (Previously Submitted) The method of claim 34, wherein the wirelessly communicating is via a satellite link.

6. (Original) The method of claim 3, further comprising the vehicle management facility controlling maintenance or repair resources based on the result.

7. (Previously Submitted) The method of claim 34:

wherein the analysis yields a result; and

further comprising wirelessly communicating the results from a plurality of vehicles to a vehicle information management facility.

8. (Original) The method of claim 7, wherein the facility stores the results from the plurality of vehicles.

9. (Previously Submitted) The method of claim 7, wherein the facility analyzes the results from the plurality of vehicles to yield a value that characterizes the operation of at least two of the plurality of the vehicles.

10. (Original) An apparatus, comprising

a first number of sensors collectively configured to provide data signals indicative of one or more operating parameters of a machine, where the first number is at least one;

a second number of semi-passive RF tags, coupled to the first number of sensors effectively to transmit the data signals, where the second number is at least one; and

one or more data collection devices that interrogate the semi-passive RF tags to read the data signals.

11. (Original) The apparatus of claim 10, wherein the first number is at least two.

12. (Original) The apparatus of claim 10, wherein the second number is at least two.

13. (Original) The apparatus of claim 10, wherein the data signals are indicative of two or more operating parameters of the machine.

14. (Original) The apparatus of claim 10, further comprising a processor, in communication with said one or more data collection devices, that processes the one or more operating parameters indicated by the data signals.

15. (Original) The apparatus of claim 10, wherein the second number is less than the first number.

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) ~~The method of claim 17,~~ A method for monitoring vehicles, comprising:

acquiring two or more operating parameters of a vehicle using one or more sensors on the vehicle;

wirelessly transmitting a first signal representative of a first number of the operating parameters to a first receiver on the vehicle, where the first number is at least two;

wirelessly transmitting a second signal representative of a second number of the operating parameters via cellular telephone connection to a remote receiver, where the second number is at least one;

processing the operating parameters with a remote receiver; and

~~further comprising~~ selecting with an on-board processor on the vehicle which of the first number of operating parameters are re-transmitted;

wherein the first number is greater than the second number.

19. (Original) The method of claim 18, wherein the selecting is performed based on the value of one or more of the first number of parameters.

20. (Original) The method of claim 18:

further comprising transmitting a third signal from the remote processor to the on-board processor;

wherein the selecting is performed based on the content of the third signal.

21. (Currently Amended) ~~The method of claim 16, further comprising~~ A method for monitoring vehicles, comprising:

acquiring two or more operating parameters of a vehicle using one or more sensors on the vehicle;

wirelessly transmitting a first signal representative of a first number of the operating parameters to a first receiver on the vehicle, where the first number is at least two;

wirelessly transmitting a second signal representative of a second number of the operating parameters via cellular telephone connection to a remote receiver, where the second number is at least one; and

processing the operating parameters with a remote receiver; and

receiving a third signal at the vehicle from the remote processor, where the third signal is responsive to the second signal.

22. (Original) The method of claim 21:

further comprising transmitting a fourth signal from the vehicle to the remote processor;

wherein the third signal is a request for additional data, and

wherein the fourth signal represents the additional data.

23. (Original) The method of claim 22, wherein the additional data includes at least one of the first number of parameters.

24. (Original) The method of claim 22, wherein the additional data includes at least one parameter that is not in the first number of parameters.

25. (Original) The method of claim 21, wherein the third signal represents a result of prognostic analysis.

26. (Original) The method of claim 21, wherein the third signal represents a result of diagnostic analysis.

27. - 33. (Cancelled)

34. (Previously Submitted) A method of performing diagnostic or prognostic analysis on operating parameters of a vehicle, comprising:

capturing a plurality of data points that characterize two or more operating parameters of the vehicle;

producing an interrogation signal that includes a selection from among the plurality of data points;

responding to the interrogation signal with the selected data points; and

performing a diagnostic or prognostic analysis on the data.